#### Service Guide to WFO Paducah

A GUIDE TO PRODUCTS AND SERVICES PROVIDED BY WFO PADUCAH FOR SOUTHEAST MISSOURI, SOUTHERN ILLINOIS, WESTERN KENTUCKY, AND SOUTHWEST INDIANA

#### Prepared by:

Ryan J. Presley, Meteorologist/Forecaster National Weather Service 8250 U.S. Highway 60 West Paducah, KY 42086

#### **Foreword**

The Service Guide to WFO Paducah was designed specifically for the news media, emergency management, and other personnel that rely on the National Weather Service for weather products and services. We believe that you will find this a handy reference tool for answering questions concerning the daily mission of the National Weather Service. If you should have any questions or would like to offer comments on this guide, please contact one of the following office managers:

Beverly A. Poole, Meteorologist-In-Charge WFO Paducah, Kentucky Ricky L. Shanklin, Warning Coordination Meteorologist WFO Paducah, Kentucky

### **Acknowledgements**

Both the practical design for the *Service Guide to WFO Paducah* and information herein were obtained from two excellent sources:

- (1) A Guide to Products and Services Provided by WSFO Louisville for Kentucky and Southern Indiana, written by Van L. DeWald.
- (2) Wisconsin Media Guide to Frequently Used NWS Weather Terms, authored by Steve Thompson and Anton F. Kapela.

# Table of Contents

I. About WFO Paducah	
A. Background & Mission	I-1
B. NWS Office Configuration	I-2
C. Zone Numbers & FIPS Codes	I-3
D. Contacting Team Members	I-4
II. Information Outlets	
A. NOAA Weather Wire Service	II-1
B. Standard Product Format	II-1
C. NOAA Weather Radio	II-3
D. Weather Information Now	II-4
E. Information Superhighway	II-4
F. Emergency Managers Weather Information Network	II-5
III. Weather Products	
A. Forecast Products	III-1
B. Severe Weather Products	III-2
C. Hydrological Products	III-3
D. Climatological Products	III-4
E. Winter Weather Products	III-5
F. Non-Precipitation Weather Products	III-6
G. General Public Information Products	III-7
IV. Weather Glossary	IV-1
V. Safety Rules	
A. Blizzard	V-1
B. Boating Weather	V-1
C. Flash Flood	V-2
D. Fog	V-2
E. Heat Wave	V-3
F. Thunderstorm	V-3
G. Tornado	V-4
H. Winter Storm	V-4
Appendix A: Anatomy of a Forecast	A-1
Appendix B: Severe Weather Descriptors	B-1
Appendix C: Wind Chill & Heat Index Charts	C-1
Appendix D: Product Cross Reference (NWS-WMO)	D-1

## Abbreviations and Acronyms

AFD Area Forecast Discussion

AGL above ground level

AMS American Meteorological Society

AOMC ASOS Operations and Monitoring Center

AR Arkansas

ASL above sea level

ASOS Automated Surface Observing System

AVN aviation forecasting model

AWC Aviation Weather Center (NCEP component)
AWIPS Advanced Weather Interactive Processing System

AWOS Automated Weather Observing System

AWS Area Weather Summary

BKN broken (sky cover)

BNA Nashville, TN (NWS product identifier)

C Celsius

CAT clear air turbulence CCF Coded Cities Forecast CDD cooling degree-day

CGI Cape Girardeau, MO (ASOS)

CHI Chicago, IL (NWS product identifier)

CLI Daily Climatic Summary
CLM Monthly Climatic Summary

CLR clear below 12,000 feet (sky cover)

CONUS contiguous United States

CPC Climate Prediction Center (NCEP component)

CPM Cooperative Program Manager

CR Central Region (NWS)
CRH Central Region Headquarters

CRS Console Replacement System (NOAA Weather Radio)

CWA county warning area

CWFA county warning and forecast area

DAPM Data Acquisition Program Manager

DIFAX digital facsimile

DOC Department of Commerce
DOD Department of Defense
DOT Department of Transportation

DY1 Day 1 DY2 Day 2 EAS Emergency Alert System

ECMWF European Centre for Medium-Range Forecasting (forecast model)

EHR Henderson, KY (AWOS)

EMWIN Emergency Managers Weather Information Network

ENSO El Niño-Southern Oscillation EPA Environmental Protection Agency ESA Electronic Systems Analyst

ESF Flood Potential Outlook
ET Electronics Technician (also El Tech)

EUMETSAT European Meteorological Satellite (NOAA equivalent)

EVV Evansville, IN (ASOS)

F Fahrenheit FA forecast area

FAA Federal Aviation Administration FCC Federal Communications Commission

FEW few (sky cover)

FFA Flood/Flash Flood Watch
FFG Flash Flood Guidance
FFS Flood/Flash Flood Statement

FFW Flood/Flash Flood Warning

FIPS Federal Information Processing System

FLS Flood Statement
FLW Flood Warning
FM frequency modulation
FOS Family of Services

FOSFAX FOS Facsimile Network (NAFAX & DIFAX)

FWF Fire Weather Forecast

FWM NFDRS Fire Weather Point Forecast

GMT Greenwich Mean Time

GOES Geostationary Operational Environmental Satellite

GOES-NEXT Next-Generation Geostationary Operational Environmental Satellite

HDD heating degree-day

HI heat index

HMT Hydrometeorological Technician

HOP Hopkinsville/Fort Campbell, KY (manual observation site)
HPC Hydrometeorological Prediction Center (NCEP component)

HPX Hopkinsville/Fort Campbell, KY (WSR-88D)

HSA Hydrologic Service Area HTM HyperText Markup

HTML HyperText Markup Language HTTP HyperText Transfer Protocol IFR instrument flight rules

IL Illinois

ILX Central Illinois/Lincoln, IL (NWS product identifier, WSR-88D)

IN Indiana

IND Indianapolis, IN (NWS product identifier, WSR-88D)

IR infrared

IWIN Interactive Weather Information Network

KY Kentucky

LAWRS Limited Aviation Weather Reporting Station

LDS Lightning Detection System

LIT Little Rock, AR (NWS product identifier)

LLWS low-level wind shear

LMK Louisville, KY (NWS product identifier)

LMRFC Lower Mississippi River Forecast Center (Slidell, LA)

LOT Chicago, IL (NWS product identifier)

LSR Local Storm Report

LSX St. Louis, MO (NWS product identifier, WSR-88D)

LVX Louisville, KY (WSR-88D) LZK Little Rock, AR (WSR-88D)

MAR Modernization and Associated Restructuring of the NWS

MB millibar

MCD Mesoscale Convective Discussion

MDH Carbondale, IL (ASOS)
MEG Memphis, TN (WSR-88D)

MEM Memphis, TN (NWS product identifier)

MET Meteorologist

METAR Meteorological Aviation Report

METEOSAT European Space Agency Meteorological Satellite

METSAT meteorological satellite

MHz megahertz

MIC Meteorologist-In-Charge MIT Meteorologist Intern

MKC Storm Prediction Center (product identifier)

MO Missouri

MOS model output statistics

MPH miles per hour

MRF medium-range forecast model

MSL mean sea level

MSLP mean sea-level pressure
MVFR marginal visual flight rules
MVN Mt. Vernon, IL (AWOS)
MWA Marion, IL (AWOS)

NAFAX National Facsimile Network NAWAS National Warning System NCDC National Climatic Data Center

NCEP National Centers for Environmental Prediction (formerly NMC)

NCRFC North Central River Forecast Center (Minneapolis, MN)

NEIC National Earthquake Information Center

NESDIS National Environmental Satellite, Data, and Information Service

NFDRS National Fire Danger Rating System

NGM nested grid model

NHC National Hurricane Center (also Tropical Prediction Center)

NIDS NEXRAD Information Dissemination Service

NM nautical mile

NOAA National Oceanic and Atmospheric Administration

NOW Short Term Forecast (Nowcast)

NPW Weather Message (non-precipitation weather)

NSSL National Severe Storms Laboratory

NVA negative vorticity advectionNWA National Weather AssociationNWP numerical weather prediction

NWR NOAA Weather Radio

NWR-SAME NOAA Weather Radio—Specific Area Message Encoder

NWS National Weather Service NWSTC NWS Training Center

NWWS NOAA Weather Wire Service

OBS observations

OHRFC Ohio River Forecast Center (Wilmington, OH)

OHX Nashville, TN (WSR-88D)

OML Operations Manual Letter (from NWS Headquarters)

OPM Office of Personnel Management

OVC overcast (sky cover)

OWB Owensboro, KY (manual observation site)

PAH Paducah, KY (NWS product identifier, WSR-88D, ASOS)

PNS Public Information Statement

POES Polar-Orbiting Environmental Satellite

POF Poplar Bluff, MO (ASOS)
POP probability of precipitation
PVA positive vorticity advection
PWO Public Weather Outlook

QPF quantitative precipitation forecast

RD Regional Director RER Record Report

RFC River Forecast Center

RH relative humidity

ROML Regional Operations Manual Letter
ROSA Remote Observation System Automation

RTP Regional Temperature and Precipitation Summary

RUC rapid update cycle (forecast model)

RVA River Summary, Precipitation Summary, River Forecasts

RVS River Statement

SAME Specific Area Message Encoder SAW Preliminary Watch Notification

SAWRS Supplementary Aviation Weather Reporting Station

SCT scattered (sky cover)

SDF Louisville, KY (NWS product identifier)
SEL Severe Thunderstorm or Tornado Watch

SELS Severe Local Storms Unit SFD State Forecast Discussion SFP State Forecast Product

SGF Springfield, MO (NWS product identifier, WSR-88D)

SID station identifier SKC clear (sky cover)

SLO Special Liaison Officer

SLS Weather Watch Redefining Statement

SM statute mile

SOO Science and Operations Officer

SPC Storm Prediction Center (NCEP component)
SPECI Special Meteorological Aviation Report

SPI Central Illinois/Lincoln, IL (NWS product identifier)

SPS Special Weather Statement
SR Southern Region (NWS)
SRH Southern Region Headquarters

STL St. Louis, MO (NWS product identifier)

STP State Temperature and Precipitation Summary

SVR Severe Thunderstorm Warning
SVS Severe Weather Statement
SWO Severe Weather Outlook
SWR State Weather Roundup

TAF Terminal Aerodrome Forecast

TN Tennessee

TOR Tornado Warning

TPC Tropical Prediction Center (NCEP component)

TWB Transcribed Weather Broadcast
TWEB Transcribed Weather Broadcast

UA upper air

UGC Universal Geographic Code

UK United Kingdom (forecast model)

USFS U.S. Forest Service
USGS U.S. Geological Survey
UTC Coordinated Universal Time

UV ultraviolet

UVI ultraviolet index

VFR visual flight rules
VHF very high frequency
VIL vertically integrated liquid

VIS visible

WARNGEN Warning Generator (AWIPS)

WC wind chill

WCF wind-chill factor

WCM Warning Coordination Meteorologist

WFO Weather Forecast Office WIN Weather Information Now

WMO World Meteorological Organization
WSH National Weather Service Headquarters
WSOM Weather Service Operations Manual

WSR weather surveillance radar

WSR-88D Weather Surveillance Doppler radar

WSW Winter Weather Message

WV water vapor

WWA Weather Watch Status Report

WWW world-wide web

WX weather

ZFP Zone Forecast Product